CLAIMS:

1. A method for infrared data transmission between several transmitter units and a common receiver station, with the individual transmitter units transmitting the data to be transmitted in a blockwise manner to the receiver station in a time interval with respect to each other, characterized in that the respective data blocks to be transmitted are transmitted repeatedly in a transmission interval of the same length for all transmitter units according to the maximum number of transmitter units, with the length of the repetition intervals which differ for all transmitter units differing at least by twice the transmission time for a maximum data block size, and that the shortest repetition interval corresponds at least to the multiple of the double transmission time for a maximum data block size, which multiple corresponds to the maximum number of transmitter units.

2. A device for infrared data transmission between several transmitter units and a common receiver station according to claim 1, with the transmitter units being associated on the one hand with memories for the data combined in a data block to be transmitted and on the other hand with a control unit connected to timing elements for reading out the transmitted data blocks from the memories, characterized in that memories (4) for the transmitted data blocks (d) can be read out repeatedly within a send interval (T) predetermined with respect to its duration depending on the number of the transmitter units (1) in repetition intervals (i1 to i4) differing for each transmitter unit (1), which intervals extend step by step from a minimum interval (i1) depending on the number of the transmitter units (1) and the double transmission time for a data block by at least the double transmission time for a data block.